

## Calendar No. 605

104TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
{ 104-381

### NATIONAL CAVE AND KARST RESEARCH INSTITUTE ACT OF 1996

---

SEPTEMBER 30, 1996.—Ordered to be printed

---

Mr. MURKOWSKI, from the Committee on Energy and Natural  
Resources, submitted the following

### REPORT

[To accompany S. 1699]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 1699) to establish the National Cave and Karst Research Institute in the State of New Mexico, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

#### PURPOSE OF THE MEASURE

The purpose of S. 1699 is to establish the National Cave and Karst Research Institute in the State of New Mexico. The purposes of the Institute would be to further the science of speleology; to centralize and standardize speleological information; to foster interdisciplinary cooperation in cave and karst research programs; to promote national and international cooperation in protecting the environment for the benefit of cave and karst land forms; and to promote and develop environmentally sound and sustainable resource management practices.

#### BACKGROUND AND NEED

The National Geographic Society has identified the protection and management of water resources—critical both to public health and to sustainable economic development—as the major issue facing the world as society enters the twenty-first century. The overwhelming majority of the Nation’s freshwater resources consists of groundwater, some 25 percent of which is located in cave and karst regions (areas of limestone formation that are characterized by sinks, ravines, and underground streams).

Over 20 percent of the earth's surface is characterized as karst. The United States as a whole is 20 percent karst. East of central Oklahoma, 40 percent of the country is karst. Approximately 58 units of the National Park System contain caves and karst features; these range from as few as 10 to 15 caves per park unit (the C&O Canal) to well over 200 caves per unit (the Grand Canyon).

Caves provide scientists with information on natural resources, human history, and evolution. Recent studies have also indicated that caves contain valuable data related to global climate change, waste disposal, ground water supply and contamination, petroleum recovery, and biomedical investigations. Caves also contain information pertinent to anthropological, archeological, geological, paleontological, and mineralogical discoveries and resources.

Congress created a major impetus for America's involvement in cave and karst protection and management in 1988 by passing the Federal Cave Resources Protection Act (Public Law 100-691), which directed the Secretaries of the Interior and Agriculture to inventory and list significant caves on Federal lands and to provide for the management and dissemination of information about caves. The inventory and list was completed in December, 1995. According to a 1994 study by the National Park Service, since the passage of the Act, Federal land management agencies have developed a heightened awareness of the management needs of the cave and karst resources on their lands, of the need for both a cave research program and a repository for cave and karst information; and of their own growing needs for assistance in inventorying and classifying their cave and karst resources.

In 1990, through the passage of Public Law 101-578, Congress directed the National Park Service to establish and administer a cave research program, and to prepare a proposal for Congress that examines the feasibility of a centralized National Cave and Karst Research Institute, associated with an existing Cave and Karst research program already established by the National Park Service. The National Park Service study report to Congress, prepared in cooperation with other Federal cave-managing agencies, cave-related organizations, cave experts, and interested individuals, was completed in December, 1994.

The study report states as goals of the Institute the furtherance of the science of speleology (cave study); centralization and standardization of speleological information; interdisciplinary cooperation in cave and karst research programs to foster research, education; promotion of national and international cooperation in environmental considerations for the protection of cave and karst land forms; and promotion of environmentally sound, sustainable research management practices. Program areas that the study considers essential to such the Institute's mission include information management, research and education.

The legislation reflects suggestions made in the study, including: joint administration; cost sharing; the location of the Institute in a local community that possesses significant cave resources (rather than inside a unit of the National Park Service) and which provides easy accessibility for researchers, students and other visitors, and is large enough to attract and retain high-quality employees and their families.

## LEGISLATIVE HISTORY

S. 1699 was introduced by Senator Bingaman on April 24, 1996. The Subcommittee on Parks, Historic Preservation and Recreation held a hearing on the bill on July 28, 1996. At the business meeting on September 12, 1996, the Committee on Energy and Natural Resources ordered S. 1699 favorably reported.

## COMMITTEE RECOMMENDATION

The Committee on Energy and Natural Resources, in open business session on September 12, 1996, by a unanimous voice vote of a quorum present, recommends that the Senate pass S. 1699.

## SECTION-BY-SECTION ANALYSIS

Section 1 entitles the Act the “National Cave and Karst Research Institute Act of 1996.”

Section 2 describes the purposes of the Act as being: (1) to further the science of speleology; (2) to centralize and standardize speleological information; (3) to foster interdisciplinary cooperation in cave and karst research programs; (4) to promote public education; (5) to promote national and international cooperation in protecting the environment for the benefit of cave and karst land forms; (6) to promote and develop environmentally sound and sustainable management practices.

Section 3 directs the Secretary of the Interior (Secretary), acting through the Director of the National Park Service, to establish the National Cave and Karst Research Institute for the purposes described in the Act in the vicinity of Carlsbad Caverns National Park in the State of New Mexico. The legislation stipulates that the Institute shall not be located within the boundaries of the park.

Section 4(a) directs that the Institute be jointly administered by the National Park Service and a public or private agency, organization, or institution as determined by the Secretary.

Section 4(b) directs that the Institute be operated and managed in accordance with a study prepared by the National Park Service in 1990.

Section 4(c) authorizes the Secretary to enter into a contract or cooperative agreement with a public or private agency, organization, or institution in order to carry out the Act.

Section 4(d) authorizes the Secretary to lease or acquire a facility for the Institute. If the Secretary determines that a suitable facility is not available, the Secretary is authorized to construct a facility for the Institute.

Section 4(e) authorizes the Secretary to accept grants or donations from private persons, and transfer funds from another Federal agency in order to carry out the Act.

Section 5 directs that Federal funds must be matched by an equal amount of funds from non-Federal sources. Appropriated funds are authorized as necessary to carry out the Act.

## COST AND BUDGETARY CONSIDERATIONS

The following estimate of the cost of this measure has been provided by the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, September 20, 1996.*

Hon. FRANK H. MURKOWSKI,  
*Chairman, Committee on Energy and Natural Resources,*  
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1699, the National Cave and Karst Research Institute Act of 1996.

Enacting S. 1699 could affect direct spending and receipts; therefore, pay-as-you-go procedures would apply to the bill.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

JAMES L. BLUM  
(For June E. O'Neill).

Enclosure.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 1699.
2. Bill title: National Cave and Karst Research Institute Act of 1996.
3. Bill status: As reported by the Senate Committee on Energy and Natural Resources on September 16, 1996.
4. Bill purpose: S. 1699 would direct the National Park Service (NPS) to establish the National Cave and Karst Research Institute in New Mexico. The NPS would be authorized to lease or construct a suitable facility for the institute, and to jointly administer the institute with another public or private organization. The bill would authorize the NPS to expend appropriated funds only to the extent that such spending is matched by nonfederal funds to help establish and operate the institute.
5. Estimated cost to the Federal Government: Assuming appropriation of the necessary funds, CBO estimates that the federal government would spend about \$6 million over the 1997–2002 period to construct a building for the institute and to begin its research operations.

[By fiscal year, in millions of dollars]

	1997	1998	1999	2000	2001	2002
Estimated authorization level .....	<sup>1</sup>	1	1	2	1	1
Estimated outlays .....	<sup>1</sup>	1	1	2	1	1

<sup>1</sup> Less than \$500,000.

The costs of this bill fall within budget function 300.

6. Basis of estimate: Based on information from the NPS, CBO estimates it would cost about \$6 million to construct a building to house the institute over a four-year planning and construction period. In addition, we estimate that it would cost about \$2 million annually to operate the institute. This estimate assumes that matching funds are provided by a nonfederal source to construct and operate the institute, and that half of these funds, or about \$6 million over the 1997–2002 period, come from federal appropriations.

7. Pay-as-you-go considerations: Section 252 of the Balanced Budget and Emergency Deficit Control Act of 1985 sets up pay-as-you-go procedures for legislation affecting direct spending or receipts through 1998. S. 1699 would authorize the Department of the Interior to accept and spend gifts and donations from private persons. Hence, pay-as-you-go procedures would apply. We estimate, however, that any gifts or donations of cash are unlikely until after the institute is operational in 2000. In any event, we expect that receipts from any gifts or donations would be offset by direct spending of these funds and thus there would be no net budgetary impact.

8. Estimated impact on State, local, and tribal governments: S. 1699 contains no intergovernmental mandates as defined in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) and would impose no costs on state, local, or tribal governments. The bill requires that a nonfederal source provide matching funds equal to the federal funds spent to construct and operate the institute. These funds might be provided by a public entity in New Mexico. In any case, such spending would be voluntary.

9. Estimated impact on the private sector: This bill contains no private-sector mandates as defined in Public Law 104-4.

10. Previous CBO estimate: None.

11. Estimate prepared by: Federal cost estimate: Kim Cawley; Impact on State, local, and tribal governments: Majorie Miller; Impact on the private sector: Carl Muehlmann.

12. Estimate approved by: Robert A. Sunshine (for Paul N. Van de Water, Assistant Director for Budget Analysis).

#### REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 1699. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 1699, as ordered reported.

#### EXECUTIVE COMMUNICATIONS

On September 13, 1996, the Committee on Energy and Natural Resources requested legislative reports from the Department of the Interior and the Office of Management and Budget setting forth Executive agency recommendations on S. 1699. These reports had not been received at the time the report on S. 1699 was filed. When these reports become available, the Chairman will request that they be printed in the Congressional Record for the advice of the Senate. The testimony provided by the Department of the Interior at the Subcommittee hearing follows:

STATEMENT OF JOHN REYNOLDS, DEPUTY DIRECTOR,  
NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

Mr. Chairman, I appreciate the opportunity to provide the Subcommittee with the views of the National Park Service on S. 1699, a bill to establish the National Cave and Karst Research Institute. The National Park Service supports this legislation; however, funding has not been requested in the Administration's budget request. For the Institute to become a reality, additional funding would need to be provided by Congress for the NPS share, and the public/private partners would need to match the federal appropriation. Federal funding for this proposal would be contingent upon NPS budget constraints and Administration priorities.

If enacted, S. 1699 would establish a National Cave and Karst Research Institute for the purpose of furthering the science of speleology, encouraging public education in the field, and promoting and developing environmentally sound and sustainable resource management practices. The Institute would be located near Carlsbad Caverns National Park. Management and operation of the Institute would be based on a partnership between the National Park Service and a public or private agency selected by the Secretary.

Cave and karst systems are vital to humankind in myriad ways. The protection and management of water resources have been identified as major issues facing the planet as we enter the 21st century—and a full 25 percent of America's freshwater resources exist in groundwater in cave and karst regions. Caves also serve as rich storehouses of information about natural resources, human history, evolution, and global climate change—not to mention such current concerns as waste disposal, petroleum recovery, and biomedical investigations.

Congress created a major impetus for America's involvement in cave and karst protection and management by passing the landmark Federal Cave Resources Protection Act of 1988. This Act, among other things, directed the Secretaries of the Interior and Agriculture to inventory and list significant caves on Federal lands. The nationwide assessment of significant Federally-owned caves began in 1994. This action has added greatly to the number of known caves on Federal land, and increased the impetus for cave management and research. Federal land managers have since developed a heightened awareness of the management needs of the cave and karst resources on these lands and of their growing needs for assistance in inventorying and classifying their cave and karst resources.

The foundation for S. 1699 stems from the study prepared by the National Park Service in response to P.L. 101-578 (November 15, 1990). In that law, Congress directed the Secretary of the Interior, acting through the Di-

rector of the National Park Service, to establish and administer a Cave Research Program and to prepare a study that examines the feasibility of establishing a centralized National Cave and Karst Research Institute.

The NPS study was completed in December of 1994. The study recommended that the Institute be jointly administered by the National Park Service and another entity. Congress has identified the National Park Service as project lead since it manages over 60 park units containing significant cave resources, it has had a Cave and Karst Research Program in place since March 1991, and it already has an appropriate general cooperative management model in use, called a "Cooperative Park Studies Unit." The National Park Service would have ultimate responsibility for the Institute, and would retain indirect control over its activities and programs. An academic entity would plan, coordinate, and administer the Institute and its programs.

The location that the study recommended is a local community (rather than a National Park Service unit) that possesses significant cave resources, provides easy accessibility for researchers, students, and other visitors, is located near the academic entity with which it is associated, and is large enough to offer a favorable quality of life in order to attract and retain high-quality employees and their families. As specifically directed by P.L. 101-578, the study focused on locating the Institute near the region surrounding Carlsbad Caverns National Park. The Carlsbad location was identified by the study because of the documented strong local community and political support, and the numerous and diverse cave and karst resources found throughout the region.

It is estimated that the cost for the Institute during the first five years, if space for the Institute was donated to the NPS, would exceed \$1.5 million dollars for operating and capital expenses alone. Since the New Mexico State University is considering housing the Institute at its Carlsbad Environmental Monitoring and Research Center during the first five years, it is anticipated that a permanent facility would need to be built by the sixth year of operation. The estimated construction cost of the Institute exceeds \$1.2 million dollars.

It is critical in times of decreasing budgets and resources that the dictates of this legislation be accomplished jointly—between the National Park Service and a designated partner in this venture, such as the State of New Mexico, New Mexico State University, or private entities. Technical cooperators for research projects could include organizations such as the Karst Waters Institute, the National Speleological Society, the Cave Research Foundation, and the American Cave Conservation Association.

All funds and efforts of the NPS must be matched at least equally and responsibility for the success of the project must be shared. We would recommend a change in bill language to emphasize this position. In Section 4 (c)

and (e) as well as Sec 5(a) we would suggest changing the Secretary "may" to the Secretary "shall". This would reaffirm that the commitment to the project is the responsibility of all parties, and its success depends completely on cooperative efforts. It would be impossible for the National Park Service to take on an effort such as this without requisite joint-funding. Without cooperation, existing NPS projects and programs would be jeopardized.

This concludes my prepared remarks concerning S. 1699, Mr. Chairman. I would be pleased to respond to any questions you may have.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law are made by the bill S. 1699 as ordered reported.

